

PUBLIC NOTICE

M2004-03



**TN DEPT. OF ENVIRONMENT & CONSERVATION
DIVISION OF WATER POLLUTION CONTROL
MINING SECTION
2700 MIDDLEBROOK PIKE SUITE 220
KNOXVILLE TN 37921**

ISSUE DATE 8/13/2004

EXPIRATION DATE 09/13/2004

TO WHOM IT MAY CONCERN: The applications described herein have been submitted for Aquatic Resource Alteration Permits pursuant to *The Tennessee Water Quality Control Act of 1977*, T.C.A. §69-3-108.

The purpose of this notice is to advise all concerned of the proposals for which permits are sought and to solicit comments and information necessary to evaluate the probable impact of the activities upon the respective water resources. The decision whether to issue or deny will in part be based upon that evaluation. All factors that may be relevant to the proposals will be considered.

Persons wishing to comment on or object to the issuance of a proposed permit are invited to submit comments in writing to the address listed above. Written statements received in this office on or before the date of expiration of the comment period, **September 14, 2004**, will become part of the record and will be considered in the determination. The public notice number, applicant's name, permit number and coordinator should be referenced.

Interested persons may also request in writing that the director of the Division hold a public hearing on any application. The request must be filed within the comment period and must indicate the interest of the person requesting it, and the reasons that the hearing is warranted. When there is sufficient public interest, the director shall hold a hearing in accordance with Rule 1200-4-1-.05(3)(G).

After consideration of comments submitted during the public comment period, the hearing record if any, and the requirements of federal and state law, the director of the Division will make determinations regarding the final action on each permit. Permit applications, supporting documentation and related comments are available for review and/or copying.

The public notice includes tentative determinations regarding the issuance, modification, denial or termination of permits for the activities proposed herein.

Permit Application Number: ARAP-#M2004-03

Applicant: Mr. William Snodgrass, Attorney-in-Fact
National Coal Corporation
319 Ebenezer Road
Knoxville, TN 37923

Location: Unnamed tributaries to Ligias Fork, Charley's Branch, New River, and Wolfpen Branch in Anderson County near Rosedale, Tennessee at 36°11'01" latitude and 84°18'55" longitude on the Duncan Flats, Tennessee USGS Quadrangle. The effected reaches are associated with National Coal Corporation, Mine No. 3, SMCRA Permit #3138.

Background Information: National Coal Corporation is proposing to develop Mine No. 3, OSM Permit #3138 in the New River watershed. Proposed mining includes the elimination of the existing highwall and restoration of degraded stream reaches that result from contour strip and augur mining the Windrock and Lower Dean coal seams. The mining related activities proposed in the National Coal Corporation permit application would result in the alteration of wet weather conveyances, intermittent stream reaches and associated wetlands on mine benches that predate the *Surface Mining and Reclamation Control Act of 1977*. As Mine No. 3 is reclaimed National Coal Corporation proposes to reconstruct and restore drainages altered by this pre-law mining in the affected watersheds. A *Potential to Affect Surface Waters* study developed for National Coal Corporation, Mine No. 3 by water quality modeling of a 10 year, 24-hour storm event projects the elimination approximately 15030 pounds of dissolved solids and 1549 pounds of sulfates from the Charleys Branch and New River watershed.

The Division's review of the permit applications determined that the scope of the project was such that the proposed activities are not covered under a general permit.

During February 25, 2004 pre-mine investigations Mining Section personnel identified stream reaches that were at least intermittent, wet weather conveyances and wetlands. The existing stream reaches have been encroached on and altered by activities associated with coal mining prior to the implementation of the *Surface Mining and Reclamation Control Act of 1977*, and other natural resource development such as logging. Information provided in the permit application indicated the wetlands identified were delineated at approximately 0.04 acres.

On March 3, 2004, the Division of Water Pollution Control-Mining Section conducted macroinvertebrate stream surveys in Charley's Branch and Wolfpen Branch. These surveys documented that the streams fully supported the use classification for fish and aquatic life approximately one mile downstream of the proposed Mine No. 3 in comparison to biological index scores for Ecoregion 69D the Cumberland Mountains. The macroinvertebrate stream surveys also documented that the habitat in these streams is moderately impaired in comparison to habitat assessment guidelines for Ecoregion 69D.

The upper watershed drainages that will be affected by the proposed activities have been mined through resulting in heavy bedload deposits that contribute to sedimentation of intermittent and perennial waters downstream.

Project Description ARAP-#M2004-03: National Coal Corporation has applied for an Individual Aquatic Resource Alteration permit for alteration and restoration type activities in approximately 19823 linear feet of wet weather conveyances and intermittent tributaries in the Charley's Branch and Wolfpen Branch watersheds.

- The permit application indicates approximately 1865 linear feet of intermittent stream and wet weather conveyance are to be altered by mining related activities by the National Coal Corporation, Mine No. 3, SMCRA Permit #3138. These stream reaches have been impacted by mining related activities prior to the implementation of the *Surface Mining and Reclamation Control Act of 1977*.
- Approximately 3250 feet of stream will be restored at a mitigation ratio of 1.7:1 for 1865 feet of stream alteration. In addition 19823 feet of wet weather conveyance is to be stabilized, enhanced, and developed as ephemeral, intermittent, or perennial stream post-mining at a mitigation ratio of approximately 6:1.
- Diversion channels are to be constructed above mining drainage routing clean water away from active mining areas. This prevents commingling with treated mine wastewater.
- The ARAP stream channels will be reconstructed on the reclaimed contours to emulate to the extent practicable the drainage patterns prior to coal mining in the watershed based on the USGS quadrangle. Reconstruction and enhancements to stream reaches will follow a generalized template. Variations from the generalized template may occur due to specific site conditions and material availability.
- Lower gradient intermittent stream channels are to be developed from road diversions that flow to the larger rock lined channels. Rock underdrains in the backfill will be developed to supplement the flow and provide a hydrologic connection to these channels. These road diversions are conservatively designed for a modeled 10-year, 24-hour precipitation event to meet SMCRA permit conditions.

- Rock lined channels are to be developed as intermittent streams to flow across the contours to a stable stream reach or conveyance. These rock-lined drains are conservatively designed for a modeled 100-year, 6-hour precipitation event to meet SMCRA permit conditions. The applicant proposes riparian enhancements and connections to the upstream hydrology to facilitate the reestablishment of intermittent streams post-mining.
- On completion of channel construction and achievement of final grade the area will be revegetated with an appropriate seed mix. Fifty-foot wide riparian zones will be established for the stream channels developed from the road diversions and thirty-foot wide riparian zones will be established for the stream channels developed from the rock-lined drains. The riparian areas will also be planted with endemic tree and shrub species at a rate of approximately 500 trees per acre.

Tentative Determination: The Division proposes to issue a conditional permit.

Permit Coordinator: Dave Turner
Mining Section
Division of Water Pollution Control
2700 Middlebrook Pike
Suite 220
Knoxville, TN 37921

Aquatic Resource Alteration Permit Conditions

1. The work shall be accomplished in conformance with the approved plans, specifications, data and other information submitted in support of the above application and the limitations, requirements and conditions set forth herein.
2. The proposed work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in Rule 1200-4-3-.03 of the Rules of the Tennessee Department of Environment and Conservation. This includes but is not limited to the prevention of any discharge that causes a condition in which visible solids, bottom deposits or turbidity impairs the usefulness of waters of the state for any of the uses designated by Rule 1200-4-4. These uses include fish and aquatic life, livestock watering and wildlife, recreation and irrigation.
3. Activities that result in the alteration to "waters of the state" other than the reaches specified in the approved plans and permit require prior authorization under a separate aquatic resource alteration permit.
4. A copy of the permit and approved plans must be kept on site during all construction phases of the activity covered.

5. Drainage and erosion controls must be in place prior to commencing construction activities.
6. Reconstructed stream reaches and discharge channels to the ARAP areas must be lined with appropriate geotextile fabric in areas where the channel is in unconsolidated or spoil material.
7. Within 30 days of beginning mining related activities National Coal Corporation must provide the Division with the proposed cut sequence and the sequence of construction for the proposed ARAP activities. Off site enhancements (e.g. clear water diversions) must be in place prior to the start of each cut sequence. The ARAP areas that are immediately upslope or downslope of areas to be actively mined must be stabilized and channel substrate enhancements in place prior to mining within the sub-watershed. National Coal Corporation must inspect the diversion channels quarterly and report the inspection results to the Division. Reconstruction of the ARAP stream channels in the areas mined is to commence on the completion of each cut sequence contemporaneous with reclamation. To evaluate the conformance of each ARAP reach to the approved plans, National Coal Corporation must provide an as-built plan of each stream reach to the Division on completion of construction activities in that reach.
8. Riparian buffers on either side of the stream channel must be established as detailed in the plans. Buffer areas without established vegetation must be planted with endemic shrub and tree species. The applicant proposes to plant tree and shrub species at the rate of five hundred stems per acre. This exceeds the required minimum rate of four hundred stems per acre. No species should compromise more than one-third of the total planted trees in the riparian buffer zones. A planting survivorship of 300 stems per acre must be attained during the five-year monitoring period.
9. Undisturbed areas within the riparian buffer zones may not require additional planting. This is subject to Division approval and National Coal Corporation must demonstrate that tree and shrub species are established in these zones and that they have not been disturbed by activities related to Mine No. 3.
10. A written agreement must be obtained from the landowners that precludes surface disturbance such as mining, harvesting of timber in the fifty-foot buffer zones for a minimum of twenty-five years with selective harvesting only in these zones thereafter. This will assist in assuring the long-term stability of the reconstructed stream reaches.

11. National Coal Corporation must establish surveyed benchmarks for 100-particle distribution study (pebble count) stations at the biological monitoring stations in Charley's Branch, Wolfpen Branch, and immediately below rock-lined drain 2(RLD-2) in a reach of the unimproved stream channel prior to any ARAP or NPDES related construction activities. The establishment of benchmarks and the "pebble count" must be conducted in accordance with the *U.S. Forest Service General Technical Report RM-245 Stream Channel Reference Sites* (Harrelson et. al.). Data from an initial "pebble count" when the benchmarks are established will be the reference data set to which subsequent data is compared. The "pebble count" results and benchmark locations are to be submitted to the Division for this purpose.
12. National Coal Corporation must conduct a 100-particle distribution study (pebble count) semi-annually at the biological monitoring stations in Charley's Branch, Wolfpen Branch, and immediately below rock-lined drain 2(RLD-2) in a reach of the unimproved stream channel. A report of the results must be submitted to the Division of Water Pollution Control-Mining Section within thirty days of the "pebble count". If the D_{50} particle size of the "pebble count" decreases more than 50% of initial D_{50} at a "pebble count" station then National Coal Corporation must notify the Division and conduct a biological stream survey within thirty days of the "pebble count" and another at ninety days. Implementation of remedial measures such as additional sediment controls, BMP's, or additional wastewater treatment will be required if the increase of sedimentation is found to have resulted from mining related activities.
13. At a minimum, the 100-particle distribution study stations and any ARAP reach under construction or constructed must be visually inspected quarterly for indications of erosion and increased sedimentation. The company must select one or more individuals who they deem qualified to conduct these inspections. The inspections must be documented with the name of the inspecting party, latitude and longitude, photographs, and notes of observations. A report of quarterly inspection results must be submitted to the Division of Water Pollution Control – Mining Section within thirty days of the inspection. If during the quarterly inspections there is significant sedimentation (e.g. new point bar formation or recent erosion of the channel bank) observed within the channel at the station below RLD-2 or if any of NPDES treatment structures 003-007 have three consecutive discharges that exceed the limits for settleable solids then a 100-particle distribution study must be conducted within thirty days at the designated benchmarks.
14. National Coal Corporation must conduct an annual biological evaluation of Charley's Branch during active mining at latitude N36.19236, longitude -W84.33292 and Wolfpen Branch at latitude N36.16111, longitude -W84.33864. The biological survey must follow the semi-quantitative riffle kick protocols specified in the *State of Tennessee SOP for Macroinvertebrate Stream Surveys, March 2002, Revised November 2003*.

15. Level I monitoring requirements must be implemented for ARAP-#M2004-03. The first two of the following items have been completed and submitted to the Division in this application:
 - Narrative description and photos of pre-project conditions
 - Pre-project habitat assessment
 - Annual narrative description and photos
 - Annual riparian vegetation survey
 - Post-project habitat assessment at the end of the required monitoring period
16. National Coal Corporation must also conduct a biological evaluation in Charley's Branch and Wolfpen Branch at the conclusion of Level I monitoring for the ARAP areas.
17. A channel morphology survey must be completed at the beginning and at the conclusion of Level I monitoring
18. A comprehensive post-project report must be submitted to the Division at the conclusion of the five-year monitoring period. This report must demonstrate that the ARAP channel, aquatic habitat areas, and riparian buffer zones have met permit conditions.
19. On successful completion of the ARAP the Division will issue a letter of finding that the conditions of the permit have been fulfilled indicating that no further action is required.

**State of Tennessee
Antidegradation Policy**

Tennessee's Antidegradation Statement is found in Chapter *1200-4-3-.06* of the *Rules of the Tennessee Department of Environment and Conservation*. The primary purpose of the antidegradation policy is to establish a greater level of protection for those waters that are identified to be of high quality. Some high-quality waters are in near-pristine condition. Others are determined to be high quality due to specialized uses and/or unique features.

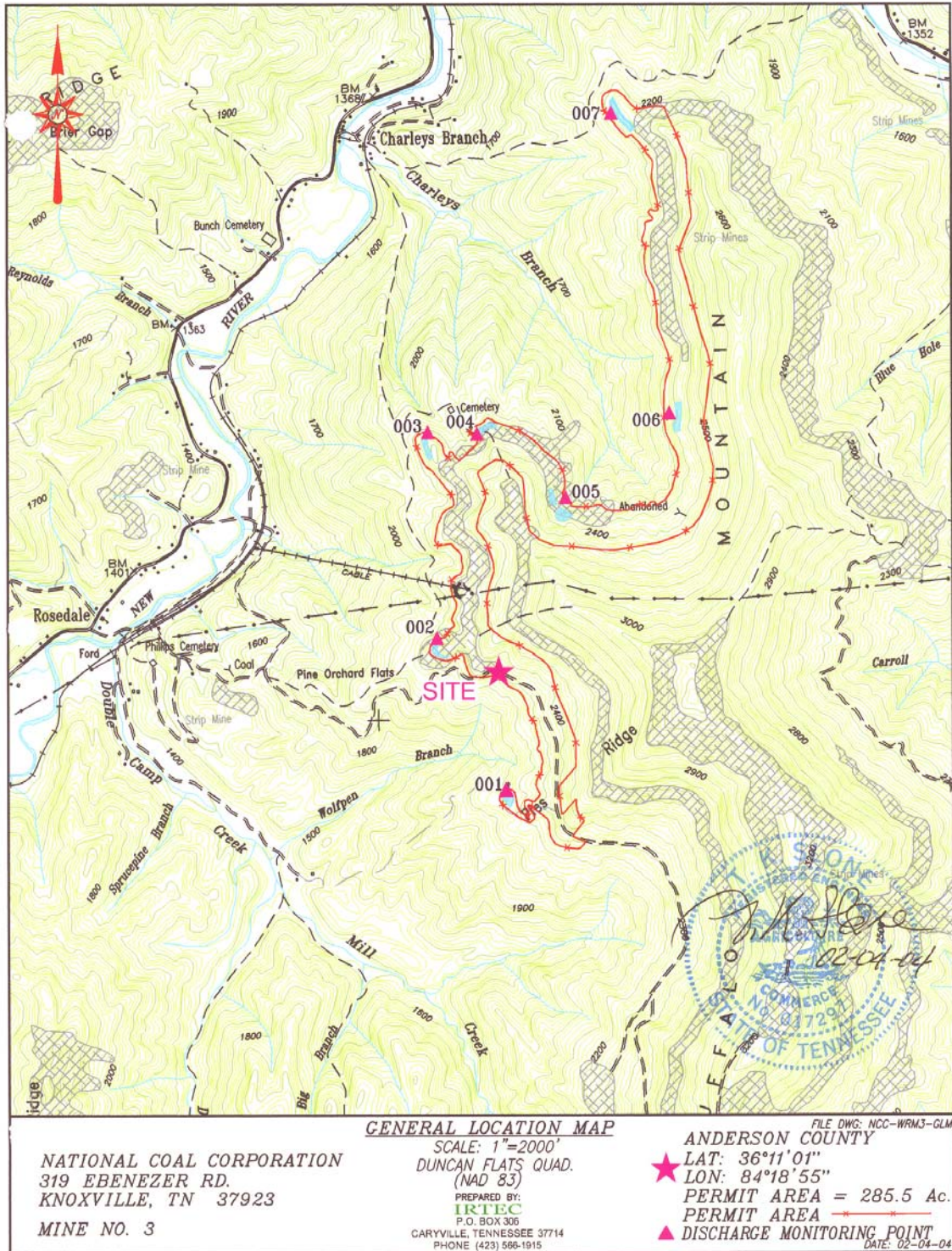
Generally, there are two types of high-quality waters. Outstanding National Resource Waters (ONRWs), or Tier 3 waters, are specifically designated by the Water Quality Control Board and are afforded the greatest level of protection. No new discharges or expansion of existing discharges are allowed to result in degradation of the existing water quality.

Other high-quality waters are identified by the Department as Tier 2 waters and are also protected against degradation. Some degradation may be allowed only if the Water Quality Control Board deems it economically and socially necessary. Other surface waters not specifically identified and/or designated as high quality are referred to as Tier 1 waters. Tennessee's Water Quality Standards must be achieved and/or maintained in these waters.

This permit does not obviate requirements of other federal, state or local laws.

The State of Tennessee reserves the right to modify or revoke this permit or to seek modification or revocation should the State determine that the activity results in more than an insignificant violation of applicable water quality criteria or violation of the Act. Failure to comply with permit terms may result in penalty in accordance with § 69-3-115 of the Act.

An appeal of this action may be made to the Water Quality Control Board. In order to appeal, a petition requesting a hearing before the Board must be filed within thirty days after receipt of the permit action. In such petition, each contention should be stated in numbered paragraphs, which describe how the proposed activity would be lawful and the action of the state is inappropriate. The petition must be prepared on 8½" by 11" paper, addressed to the Water Quality Control Board and filed in duplicate at the following address: Paul E. Davis, Director, Division of Water Pollution Control, 6th Floor L & C Annex, 401 Church Street, Nashville, Tennessee 37243-1534. Any hearing would be in accordance with T.C.A. §69-3-110 and 4-5-301 et. seq. Questions concerning this certification should be addressed to Dave Turner at 865-594-5541 or Dan Murray at 865-594-5549.



Permit Application M2004-01

National Coal Corporation
Mine No. 3
Site Location Map